

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/030945 A1

- (51) International Patent Classification⁷: **C12N 9/10**, 15/54, C12Q 1/68, G01N 33/50
- (21) International Application Number: PCT/EP2004/010386
- (22) International Filing Date: 16 September 2004 (16.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 03021637.8 26 September 2003 (26.09.2003) EP
- (71) Applicant (for all designated States except US): **BAYER HEALTHCARE AG** [DE/DE]; 51368 Leverkusen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **GOLZ, Stefan** [DE/DE]; Bückmannsmühle 46, 45326 Essen (DE). **BRÜGGEMEIER, Ulf** [DE/DE]; Leysiefen 20, 42799 Leichlingen (DE). **WEINGÄRTNER, Bernhard** [DE/DE]; Birkenweg 4, 42489 Wülfrath (DE). **GEERTS, Andreas** [DE/DE]; Schuckertstr. 29, 42113 Wuppertal (DE).
- (74) Common Representative: **BAYER HEALTHCARE AG**; Law and Patents,, Patents and Licensing, 51368 Leverkusen (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NEW ACYLGLYCEROL ACYLTRANSFERASE-LIKE PROTEIN MGAT-X1 AND USES THEREOF

(57) Abstract: The present invention is directed to a polynucleotide sequence of a novel acylglycerol acyltransferase-like protein MGAT-X1. The invention also provides the human MGAT-X1 associated with the dermatological diseases, urological diseases, muscle-skeleton disorders, hematological diseases, cancer, reproduction disorders, neurological diseases, metabolic diseases, cardiovascular diseases or gastroenterological diseases. The invention also provides assays for the identification of compounds useful for the modulation of dermatological diseases, urological diseases, muscle-skeleton disorders, hematological diseases, cancer, reproduction disorders, neurological diseases, metabolic diseases, cardiovascular diseases or gastroenterological diseases for treating of such diseases associated with expression of the MGAT-X1. The invention also features compounds which bind to and/or activate or inhibit the activity of MGAT-X1 as well as pharmaceutical compositions comprising such compounds.

WO 2005/030945 A1